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<b>TRANSMITTAL LETTER TO THE UNITED STATES</b>		ATTORNEY'S DOCKET NUMBER 1914-SPL
<b>DESIGNATED/ELECTED OFFICE (DO/EO/US)</b>		U.S. APPLICATION NO. (If known, see 37 CFR 1.5)
<b>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		<b>10/541112</b>
INTERNATIONAL APPLICATION NO. PCT/US03/19075	INTERNATIONAL FILING DATE 06/18/2003	PRIORITY DATE 01/06/2003
TITLE OF INVENTION Hydroxyl Free Radical-Induced Decontamination of Airborne Spores, Viruses and Bacteria in a Dynamic System		
APPLICANT(S) FOR DO/EO/US Potember et al.		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).</li> </ol>		
<b>Items 11 to 20 below concern document(s) or information</b>		
<ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).</li> <li>20. <input type="checkbox"/> Other items or information:</li> </ol>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION NO. <b>10/941112</b>		INTERNATIONAL APPLICATION NO. <b>PCT/US03/19075</b>		ATTORNEY'S DOCKET NUMBER <b>1914-SPL</b>	
The following fees are submitted:				<b>CALCULATIONS</b>	<b>PTO USE ONLY</b>
21. <input checked="" type="checkbox"/> Basic national fee ..... \$300				\$ 300.00	
22. <input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)..... \$100 All other situations..... \$200				\$ 200.00	
23. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... \$100 International Search Report prepared and provided to the Office ..... \$400 All other situations..... \$500				\$ 100.00	
<b>TOTAL OF 21, 22 and 23 =</b>				\$ 600.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE		
- 100 =	0 /50 =	0	x \$250.00	\$ 0.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	48 - 20 =	28	x \$50.00	\$ 1,400.00	
Independent claims	4 - 3 =	1	x \$200.00	\$ 200.00	
Multiple Dependent Claims (if applicable) <input type="checkbox"/>			+ \$360.00	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 2,200.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$ 1,100.00	
<b>SUBTOTAL =</b>				\$ 1,100.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
<b>TOTAL NATIONAL FEE =</b>				\$ 1,100.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per				\$	
<b>TOTAL FEES ENCLOSED =</b>				\$ 1,100.00	
				Amount to be refunded:	\$
				Amount to be charged:	\$

a. ☐ A check in the amount of \_\_\_\_\_ to cover the above fees is enclosed.

b. ☒ Please charge my Deposit Account 01-2218 in the amount of \$1,100.00 to cover the above fees.  
 A duplicate copy of this sheet is enclosed.

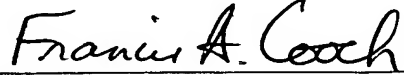
c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment  
 to Deposit Account 01-2218. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card  
 information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or  
 (b)) must be filed and granted to restore the International Application to pending status.

**SEND ALL CORRESPONDENCE TO:**

Francis A. Cooch  
 Deputy General Counsel (Patents)  
 Office of Patent Counsel  
 The Johns Hopkins University Applied Physics Laboratory  
 11100 Johns Hopkins Road, MS 7-156  
 Laurel, MD 20723-6099

  
 SIGNATURE  
 \_\_\_\_\_  
 Francis A. Cooch  
 NAME  
 \_\_\_\_\_  
 31,495  
 REGISTRATION NUMBER

10/541112

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JHU/APL File Number 1914-SPL

In re application of: Potember et al.

For: Hydroxyl Free Radical Induced Decontamination of Spores, Viruses and Bacteria in a Dynamic System

Mail Stop PCT  
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P. O. Box 1450  
Alexandria, VA 22313-1450

## EXPRESS MAIL CERTIFICATE

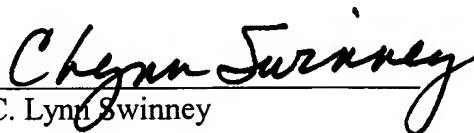
"Express Mail" label number EV 247713870 US

Date of Deposit: 6/30/2005

I hereby certify that the following attached patent application as identified above consisting of the following:

1. Postcard receipt
2. Transmittal Letter to the U.S. Designated/Elected Office (2 pages) (in duplicate)
3. Copy of Declaration and Power of Attorney for Patent Application (3 pages)
4. Information Disclosure Statement (1 page)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

  
C. Lynn Swinney